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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,889	03/16/2004	Chhotu N. Patel	FTP167A US	4486

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EXAMINER

MCCRAW, BARRY CLAYTON

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,889

Applicant(s)

PATEL ET AL.

Examiner

B. Clayton McCraw

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/16/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "said upper portion" in line 12, and "said lower portion" in line 14. Claim 7 recites the limitation "the surface area of said socket portion of said mounting bracket" in lines 1-2. Claim 17 recites the limitation "the surface area of said socket portion of said mounting bracket" in line 2. Claim 11 recites the limitation "said upper portion" in line 35, "said refrigerant liquid" in line 38, and "said lower portion" in line 38. There is insufficient antecedent basis for the limitations in these claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1, 2, 8, 11, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba et al. (US 5,709,106). Inaba et al. explicitly teach a substantially cylindrical vessel (24) having a base wall (see Figure 8a); a side wall (see Figure 8a) extending generally in a direction away from the base wall; and an end wall (see Figure 8a) terminating the side wall, defining an interior chamber; and a refrigerant inlet pipe (39) mounted to the base wall extending into interior and chamber of the vessel (see Figure 8a); the refrigerant inlet pipe extending in a direction generally away from the base wall (see Figure 8a) within the central interior of the vessel and terminating in an exit end facing the end wall (see Figure 8a); the refrigerant inlet pipe adapted for directing refrigerant into contact with the end wall (see Figure 8a); and the end wall and side wall comprising an outer surface (see Figure 3). Inaba et al. also teach an integrated receiver-dryer-condenser (see Figure 2) comprising a condenser (23) having a first and second vertically disposed header tank (26a and 26b), a core member positioned between the first and second header tanks (28), an inlet in one of the first and second header tanks (Figure 2, 40 into 53), an intermediate outlet port in one of the first and second header tanks (Figure 2, 53 into 39), an intermediate inlet port of one of the first and second header tanks (Figure 2, 40 into 53), and an outlet in one of the first and second header tanks (Figure 2, 53 into 39). Inaba et al. do not explicitly teach a concave end wall. It would have been obvious to one of ordinary skill in the art

to modify the shape of the condenser structure as taught by Inaba et al. as a variation in geometric shape is simply a matter of design choice.

7. Claim 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba et al. (US 5,709,106) in view of Shibata et al. (US 6,470,704 B2). Inaba et al. teach all of the elements of the current invention as described above, but do not teach a mounting bracket having a socket portion in contact with the end wall of a receiver dryer. Shibata et al. explicitly discloses a mounting bracket having a socket portion in contact with the end wall of a receiver dryer (see Figure 7b). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the condenser structure as taught by Inaba et al. with the mounting bracket as disclosed by Shibata et al. because placing a mounting bracket on the end wall of the structure and placing a mounting bracket on the side wall of the structure are equivalent in function and simply a matter of design choice.

***Allowable Subject Matter***

8. Claim 21 and 22 are allowed.

9. Claims 3-5, 7, 9, 10, 13-15, 17, 19 and 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Claims 3-5, 7, 9, 10, 13-15, 17, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Clayton McCraw whose telephone number is (571) 272-3665. The examiner can normally be reached on M-F 8:30AM-5:00PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BCM  
10/31/2005



MELBA N. BUMGARNER  
PRIMARY EXAMINER